PROJECT DESCRIPTION

I. MD 214 AND CAMPUS WAY

This traffic control signal shall be included with the MD 214 Interconnect System. The sampling stations shall be installed on the farside of the east and the west legs of MD 214. The street lighting and the guide shield assembly signs are existing.

MD 214 is assumed to run in an east-west direction. The intersection shall continue to operate in a six-phase, full-traffic-actuated mode with Exclusive left turns for MD 214. Campus Way approaches operate in a split phase. The existing pedestrian movement to cross the south leg of Campus Way and the pushbutton actuated pedestrian movement to cross the west leg of MD 214 shall remain in

The existing NEMA size "6" base-mounted cabinet shall be modified. The controller will be exchanged for an ASC II'S with telemetry panel and harness. The cabinet shall be retrofitted with two detector panels, rack power supply, and seven (7) 4-channel rack mounted amplifiers.

II. MD 214 AND KETTERING DRIVE/ LAKE ARBOR WAY

This traffic control signal shall be included with the MD 214 Interconnect System. The street lighting is existing. Guide shield assembly signs shall be installed on the existing signal structures.

MD 214 is assumed to run in an east-west direction. The intersection shall continue to operate in a six-phase, full-traffic actuated mode with Exclusive left turns for MD 214. The side street approaches operate concurrently. The existing pedestrian movement to cross Kettering Drive and the pushbutton actuated pedestrian movement to cross the west leg of MD 214 shall remain

The existing Nema size "6" base-mounted cabinet shall be modified. The controller will be exchanged for an ASC II'S with telemetry panel and harness. The cabinet shall be retrofitted with a detector panel, rack power supply, and four (4) rack mounted amplifiers.

III. MD 214 AND MD 193 (WASTKIN PARK/ ENTERPRISE ROAD)

This traffic control signal shall be the master control for the MD 214 Interconnect System. The sampling stations shall be installed on the farside of the east and the west leg of MD 214. The street lighting is existing. Guide shield assembly signs shall be installed on the existing signal structures.

MD 214 is assumed to run in an east-west direction. The intersection shall continue to operate in a six-phase, full-traffic actuated mode with Exclusive left turns for MD 214. The side street approaches operate in a split phase.

The existing NEMA size "6" base-mounted cabinet shall be modified. The controller will be exchanged for an ASC II master controller and an ASC II'S with telementry panels and harnessess. The cabinet shall be retrofitted with two detector panels. rack power supply, and six (6) rack mounted amplifiers.

IV. MD 214 AND ENTRANCE TO SIX FLAGS PARK

This traffic control signal shall be included with the MD 214 Interconnect System. The street lighting and the guide shield assembly signs are existing.

MD 214 is assumed to run in an east-west direction. The intersection shall continue to operate in a four-phase, full-traffic actuated mode with Exclusive left turn on the west leg for MD 214. The Entrance to Six Flags shall continue operating alone. The existing pushbutton actuated pedestrian movement to cross the west leg of MD 214 shall remain in operation.

The existing Nema size "6" base-mounted cabinet shall be modified. The controller will be exchange for an ASC II'S with a telemetry panel and harness. The cabinet has a detector panel, rack power supply, and four (4) rack mounted amplifiers.

V. MD 214 AND CHURCH ROAD

This traffic control signal shall be included with the MD 214 Interconnect System.

The street lighting and the guide shield assembly signs are existing.

MD 214 is assumed to run in an east-west direction. The intersection shall continue to operate in a six-phase, full-traffic actuated mode with Exclusive/ permissive left turns for MD 214. The side street approaches operate concurrently.

The existing Nema size "6" base-mounted cabinet shall be modified. The controller will be exchanged for an ASC II'S with a telemetry panel and harness. The cabinet has a detector panel, rack power supply, and four (4) rack mounted amplifiers.

VI. MD 214 AND JENNINGS MILL ROAD/DEVONWOOD DRIVE

This traffic control signal shall be included with the MD 214 Interconnect System. The sampling stations shall be installed on the farside of the east and the west legs of MD 214. The street lighting and the guide shield assembly signs are existing.

MD 214 is assumed to run in an east-west direction. The intersection shall continue to operate in a six-phase, full-traffic actuated mode with Exclusive/ permissive left turns for MD 214. The side street approaches operate concurrently.

The existing Nema eight-phase controller housed in size "6" base-mounted cabinet shall be equipped with a telemetry panel and harness. The cabinet has two detector panels, rack power supply and five (5) 4-channel rack mounted amplifiers.

VII. SPECIAL NOTES:

- 1. The Contractor shall be responsible for terminating all signal cables excluding interconnect, to the appropriate terminals and shall lable each.
- 2. All other controller wiring will be preformed by the SHA Signal Shop. The Contractor shall contact Mr. Ed Rodenhizer at 410-787-7650, seventy-two hours in adarnce of the internal work.
- 3. Additional Interconnect cable is proposed to be coiled in the handholes at the intersection of MD 214 and Danfield Rd./ Jared Rd. for possible future signalization.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY M.S.H.A.

ITEM NO. QUANTITY UNIT DESCRIPTION

- 3 EA Detector rack retrofit.
- EA Detector amplifier 4-channel rack mounted.
- EA Detector panel.
- EA Detector power supply.
- EA 12" x 30' Steel strain pole.
- EA ASC II's controller with telemetry panel and harness

1 EA ASC II Master Controller with telmemetry panel and harness.

- 144 SF Flat Sheet aluminum sign (white).
 - 2 each Guide Shield Assembly pole mounted sign (48" x 75") M3-3 "WEST" (30"x15"), M1-5 "MARYLAND 214" (48"x 36"), M6-1"LEFT ARROW" (30"x24").
 - 2 each Guide Shield Assembly pole mounted sign (48" x 75") M3-2 "EAST" (30"x15"), M1-5 "MARYLAND 214" (48"x36"), M6-1 "LEFT ARROW" (30"x24").
 - 2 each Guide Shield Assembly pole mounted sign (30" x 51") M3-2 "EAST" (24"x12"), M1-5 "MARYLAND 214" (30"x 24"), M6-1 "RIGHT ARROW" (21"x 15"),
 - 2 each Guide Shield Assembly pole mounted sign (30" x 51") M3-4 "WEST" (24"x12"). M1-5 "MARYLAND 214" (30"x24"), M6-1 "RIGHT ARROW" (21"x15").

NOTE: The cost for the detector rack retrofit. 4-channel ampiliers, and power supply shall be changed to the State Wide Detector Up-grade Program.

EQUIPMENT LIST (con't)

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO. QUANTITY UNIT DESCRIPTION.

- EA Maintenance of traffic per assignment.
- CY Class 2 excavation.
- CY Test pit excavation
- EA Heat applied preformed permanent thermoplastic pavement marking arrow (left).
- EA Remove existing pavement marking letter or arrow.
- LF 5" White heat applied permanent thermoplastic pavement marking. 5006
- LF Removal of existing pavement marking, any width. 5008
- 260 SF 4" sidewalk. 6004
- Adjust and re-ring existing span wire. 8005
- 8015 3″ weatherhead.
- 8043 Install steel strain pole.
- EA Non-Invasive probe with 1000' lead in. 8046
- Removal and disposal of existing equipment. 8051
- LF 3" polyvinyl chloride (Schedule 80) electrical conduit (trenched). 8054
- LF 4" polyvinyl chloride (Schedule 80) electrical conduit (bored). 8055 2010
- LF 4" polyvinyl chloride (Schedule 80) electrical conduit (trenched). 8056
- LF 12 pair communication cable, underground (jellyfilled). 8058
- 8063 CY Concrete foundation for signal equipment.
- LF No. 6 AWG stranded bare copper ground wire. 8066
- 8067 30 LF 1" galvanized steel electrical conduit for detector sleeve.
- LF 3" polyvinyl chloride (Schedule 80) electrical conduit (bored). 8069
- LF 1" liquid tight non-metallic flexible conduit for detector sleeve. 8073
- 8076 133 EA Handhole
- SF Install overhead signs. 8079
- EA Ground rod (3/4" dia x 10' length). 8083
- LF 2 conductor (No 14 AWG) electrical cable- aluminum shielded. 8084
- LF Loopwire (No 14 AWG) encased in 1/4" flexible tubing. 8090
- LF Sawcut for signal (loop detector). 8091
- LF 3/m" dia. steel span wire. 8093

EQUIPMENT LIST (con't)

- C. SHA Forces shall remove the controller and all auxiliary equipment from the five controller cabinets.
- All other materials to be removed by the contractor shall become the property of the contractor.

The following contact persons for District #3 are as follows:

Mr. Charlie Watkins District Engineer Phone: (301) 513-7300

Mr. Majid Shakib Assistant District Engineer - Traffic Phone: (301 513-7358

Mr. Randy Brown Assistant District Engineer - Maintenance Phone: (301) 513-7304

Mr. Augie Rebish Assistant District Engineer - Utility Phone: (301) 513-7350

Mr. Richard L. Daff, Sr. Chief, Traffic Operations Division Phone: (410) 787-7630



STREET TRAFFIC STUDIES, LTD.

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Fax (410) 590-6637

3921xGI.DGN

TASK

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION MD 214: CHURCH RD. TO JENNINGS MILL RD.

SYSTEM GENERAL INFORMATION SHEET

RAWN BY: EMM CHECKED BY<u>: **RRZ[KJM**</u> NONE SCALE: 8/30/01

.A.P. NO. S.H.A. NO. COUNTY:

4127 XGI XX1085185 PRINCE GEORGE'S T,I,M,S, NO, E 448 OG MILE: 05.10 to 09.48

SHEET NO. 6 of 16

921-3921/gr:392ikgr.dgm Aug. 30. 2001 11:33.04